

Fördermöglichkeiten für *innovative öffentliche Beschaffung* im Forschungsrahmenprogramm der EU **HORIZONT 2020**

Ausschreibungsübersicht für den Zeitraum 2018-2020 für PCP und PPI-Maßnahmen (Meta-
Arbeitsprogramm)

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Tabellarische Ausschreibungsübersicht (Calls für PPI, PCP und CSA)

Call	Titel	Typ	Budget in Mio EUR	Deadline	Seite
Forschungsinfrastrukturen					
INFRAINNOV-04	Innovation pilots	IA	30	17.3.2020	8
Grundlegende und industrielle Technologien – IKT					
ICT-others (11)	Eurochain: Developing a European Public Blockchain Infrastructure	PCP	07	2020 (tbd)	
Grundlegende und industrielle Technologien – Raumfahrt					
EGNSS-5	EGNSS applications for public authorities' pilot	PCP	3	5.3.2020	
Gesundheit, demographischer Wandel und Wohlergehen					
BHC-20a	PCP for integrated care solutions	PCP			10
BHC-20b	PPI for diagnostics for infectious diseases	PPI	25	7.4.2020	11
DTH-14	Digital health & care services (tbc)	PCP	9	7.4.2020	13
Sichere, saubere und effiziente Energie					
LC-SC3-JA-3	Wave Energy Research & Development	PCP	20	27.8.2019	6
LC-SC3-RES-10	100% renewable energy	PCP	15	26.3.2020	8
Sichere Gesellschaften					
SU-GM01	Pan-European networks	CSA	7	27.8.2020	
SU-GM02	Strategic PCPs of innovative, advanced systems to support security	PCP	24	27.8.2020	
Intelligenter, grüner und integrierter Verkehr					
MG-3-8-2020	'First of a Kind' solutions for sustainable transport and mobility	CSA	1,5	21.4.2020	
LC-MG-1	Cities for smart and clean mobility	CSA	4	21.4.2020	

Nähere Informationen zu Horizont 2020, den Förderformen PCP, PPI und CSA sowie den Ausschreibungen finden Sie auf den folgenden Seiten in diesem Meta-Arbeitsprogramm.

Vorbemerkung

Innovative öffentliche Beschaffung bringt Vorteile für alle Akteure der öffentlichen Beschaffung. Durch sie kann die Infrastruktur öffentlicher Häuser modernisiert und vor allem optimiert werden, prozessuale und ressourcenbelastende Aufwendungen können reduziert werden, durch neue Abstimmungs- und Einbindungsverfahren steigert sich die Bedarfsträgerzufriedenheit, ein erforderliches strategisches Vorgehen schafft neue Handlungsfelder und die Innovationskraft der Wirtschaft wird erheblich unterstützt und neue Innovationsfelder geschaffen. All dies führt zu einem umfassenden, ganzheitlichen Projektmanagement bei der Beschaffung, was über die traditionellen Vergabeverfahren hinausgeht und die Aufgabenfelder der Beschaffer erheblich erweitert.

Seit nunmehr fast 10 Jahren bietet die EU Förderprogramme an, die von öffentlichen Stellen genutzt werden können, um innovative Produkte in ihren Häusern anzuschaffen, zu erproben und erfolgreich (weiter-) zu entwickeln. Die öffentlichen Beschaffer werden dadurch Teil eines umfänglichen Strategie- und Projektentwicklungsprozesses. Eigens dafür stehen erhebliche Gelder zur Verfügung (i.d.R. im ein-bis zweistelligen Millionenbereich), die durch drei Instrumente der europäischen Kommission realisiert werden können:

- **Beschaffungsnetzwerke: Coordination and Support Action – CSA**

Netzwerkprojekte, in denen sich Konsortien aus europäischen öffentlichen Beschaffern darüber abstimmen, welche Innovationen für gemeinsame Bedarfe sinnvoll sein könnten. Ergänzt werden diese Projekte durch Marktrecherchen und -Konsultationen, um den Stand der Technik für innovative Produkte oder Lösungen zu erkunden.

Die EU-Förderung beträgt 100% der förderfähigen Kosten.

- **Vorkommerzielle Auftragsvergabe: Pre-Commercial Procurement – PCP**

Sollte die anvisierte Lösung oder das Produkt noch nicht am Markt verfügbar ist, kann sich daran ein Projekt der vorkommerziellen Auftragsvergabe anschließen. In einem PCP-Projekt schreibt das internationale Beschaffer-Konsortium ein dreistufiges Forschungsprojekt aus (Machbarkeitsstudie, Prototypenentwicklung und Prototypentest), durch das Unternehmen F&E-Leistungen bedarfsgerecht und nachfrageorientiert erbringen können.

Die EU-Förderung beträgt 90% der Beschaffungskosten für die nachfrageorientierte Entwicklung innovativer Lösungen.

- **Auftragsvergabe: Public Procurement of Innovative Solutions – PPI**

Daran anschließend oder unabhängig von vorangegangenen Prozessen fördert die Europäische Kommission die Beschaffung von innovativen Produkten bzw. Lösungen (Public Procurement of Innovative Solutions – PPI).

Die EU-Förderung beträgt 35% der Beschaffungskosten für die innovative Lösung, das innovative Produkte.

Eine **detaillierte Beschreibung der Fördermaßnahmen** finden Sie im Dokument „Annex E: Specific requirements for innovation procurement (PCP/PPI) supported by Horizon 2020 grants“¹

Zu dieser Übersicht

Dieses Dokument soll eine Übersicht über alle Ausschreibungen zu innovativer öffentlicher Beschaffung geben, die in den Fach-Arbeitsprogrammen 2018-20 im EU-Forschungsrahmenprogramm Horizont 2020 gefördert werden. In der vorliegenden Fassung wurde im Juni 2019 eine Aktualisierung vorgenommen, so dass abgelaufene Ausschreibungen gelöscht und Neue (aus dem Jahr 2020) ergänzt wurden. Die Angaben beziehen sich auf die von der Europäischen Kommission aktualisierten Horizont 2020-Arbeitsprogramme 2018-20 (Stand Juli 2019). .

Die einzelnen Ausschreibungen und die entsprechenden Ausschreibungsunterlagen werden (spätestens bei Veröffentlichung) auf dem [Teilnehmerportal der Europäischen Kommission](#)² veröffentlicht. Dort sind auch alle Arbeitsprogramme 2018-20 zu finden³.

Dieses Meta-Arbeitsprogramm sowie weitere Informationen zur innovativen öffentlichen Beschaffung finden Sie auf der Seite <https://www.koinno-bmw.de/eu-foerderung/> .

Es besteht kein Anspruch auf Vollständigkeit.

¹ http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-e-inproc_en.pdf

² <http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html>

³ <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/reference-documents;programCode=H2020>

EU-Kontaktstelle für öffentliche Beschaffung von Innovationen

Innovative öffentliche Beschaffung geht über die anerkannten, traditionellen Vergabeverfahren hinaus und bietet Schnittmengen mit Aufgaben der strategischen Planung, des ganzheitlichem Projektmanagements und der Mitgestaltung an innovativen Produkten. Um diese zusätzlichen Kompetenzerweiterung der Beschaffer zu flankieren und zu unterstützen, hat das Bundesministerium für Wirtschaft und Energie (BMWi) mit der EU-Kontaktstelle eine zentrale Beratungsstelle eingerichtet: <https://www.koinno-bmwi.de/>. **Bitte wenden Sie sich bei Fragen zur Antragstellung gerne an die EU-Kontaktstelle.**

Die EU-Kontaktstelle arbeitet im Auftrag des Bundesministeriums für Wirtschaft und Energie (BMWi) und ist beim nationalen Kompetenzzentrum für innovative Beschaffung (KOINNO) beim Bundesverband für Materialwirtschaft, Einkauf und Logistik e.V. (BME) angesiedelt.

DLR Projektträger: Wir bringen Forschung, Innovation und Bildung voran

Das „Meta-Arbeitsprogramm zur innovativen öffentlichen Beschaffung“ hat der DLR Projektträger, Mitglied im Konsortium des Projektes KOINNO aus den Arbeitsprogrammen 2018-20 für Horizont 2020, dem EU-Rahmenprogramm für Forschung und Innovation, zusammengestellt.

Der DLR Projektträger hat sich auf Dienstleistungen zur Förderung von Forschung, Innovation und Bildung spezialisiert. Er arbeitet im Auftrag von Bundesministerien, der Europäischen Kommission, Bundesländern sowie Wissenschaftsorganisationen, Stiftungen und Verbände. Er berät zu politischen und einrichtungsbezogenen Strategien und Programmen, begleitet Forschungsfördervorhaben fachlich und administrativ, unterstützt den Wissenstransfer sowie die Verwertung von Forschungsergebnissen. Sein Themenspektrum reicht von Bildung, Gesundheit, Gesellschaft, Innovation, Technologien, Umwelt und Nachhaltigkeit bis hin zu europäischer und internationaler Zusammenarbeit. Als einer der größten Projektträger Deutschlands betreut er derzeit rund 10.000 Vorhaben und mehr als eine Milliarde Euro Forschungsgelder.

HORIZON 2020

EU-Forschungsrahmenprogramme sind seit 1984 das wichtigste Instrument der Europäischen Union (EU), um grenzüberschreitend Forschung und Innovation in unterschiedlichen strategisch wichtigen Bereichen anzuregen. Im 8. Rahmenprogramm – Horizont 2020 – werden erstmals Maßnahmen entlang der gesamten Innovationskette gefördert: Von den ersten Ideen für die Grundlagenforschung bis hin zu fertig entwickelten neuartigen Produkten, Dienstleistungen und Verfahren für Markt und Gesellschaft stehen rund 80 Milliarden Euro zur Verfügung (2013-2020).

Ein Großteil der Fördergelder wird zur Lösung von gesellschaftlichen Herausforderungen, wie dem Klimawandel oder medizinischem Fortschritt aufgewendet. Die Förderung von Schlüsseltechnologien, wie den Informations- und Kommunikationstechnologien, soll Europa eine führende Rolle in der Industrie sichern und gleichzeitig die Grundlage zur Lösung gesellschaftlicher Herausforderungen legen.

Das Forschungsrahmenprogramm der EU „Horizont 2020“ ist in drei Säulen unterteilt. Die Zuordnung der Ausschreibungen der innovativen öffentlichen Beschaffung zu den einzelnen Säulen ist aus der vorstehenden Abbildung ersichtlich.

I Wissenschafts- exzellenz	II Führende Rolle der Industrie	III Gesellschaftliche Herausforderungen	Verbreitung von Exzellenz und Ausweitung der Beteiligung
Europäischer Forschungsrat (ERC)	Grundlegende und industrielle Technologien	Gesundheit, demografischer Wandel und Wohlergehen	Wissenschaft mit der und für die Gesellschaft
Künftige und neu entstehende Technologien (FET)	Zugang zur Risikofinanzierung	Ernährungs- und Lebensmittelsicherheit, Land- und Forstwirtschaft und Biowirtschaft	
Marie-Skłodowska- Curie-Maßnahmen (MSCA)	Innovation in KMU	Sichere, saubere und effiziente Energie	Gemeinsame Forschungsstelle (JRC)
Forschungs- infrastrukturen		Intelligenter, umweltfreundlicher und integrierter Verkehr	
		Klimaschutz, Umwelt, Ressourceneffizienz und Rohstoffe	Europäisches Innovations- und Technologieinstitut (EIT)
		Europa in einer sich verändernden Welt	
		Sichere Gesellschaften	

Abb.1: Programmstruktur Horizon 2020, eigene Darstellung

In sog. Arbeitsprogrammen, die gemäß der obigen Programmstruktur untergliedert sind, fordert die EU-Kommission dazu auf, Vorschläge für die von ihr finanzierten Förderprojekte und –aktivitäten einzureichen.

Das Nachfolgeprogramm Horizont Europa, das ab 2021 bis 2027 Forschung und Innovationen fördern soll, ist derzeit in Vorbereitung.

Die Förderung von innovativer Beschaffung in Horizont 2020

Die Europäische Kommission unterstützt die innovative öffentliche Beschaffung durch die zwei oben erwähnten Instrumente:

Für die nachfrageorientierte Entwicklung innovativer Lösungen (**vorkommerzielle Auftragsvergabe (Pre-Commercial Procurement – PCP)**) beträgt die EU-Förderung 90% der förderfähigen Kosten.

Die EU-Förderung für den **Einkauf von innovativen Produkten bzw. Lösungen (Public Procurement of Innovative Solutions – PPI)** beträgt 35% der Beschaffungskosten.

Antragsberechtigt sind alle natürlichen und juristischen Personen, die ein Konsortium bilden, das aus mindestens drei voneinander unabhängigen Einrichtungen (in diesem Fall Beschaffer) aus mindestens drei unterschiedlichen EU-Mitgliedsstaaten (oder assoziierten Staaten) bestehen muss.

Weitere Informationen zu Horizont 2020:

Link zum deutschen Portal von Horizont 2020 www.Horizont2020.de und [Video Horizon 2020](#)

Ausschreibungen

Forschungsinfrastrukturen⁴

ICT-other actions [11] - **Innovation pilots**

Säule I: Wissenschaftsexzellenz (entsprechend der Anordnung in Abb.1)

Call identifier: INFRAINNOV-04-2020

Types of action:	RIA Research and Innovation action		
Deadline Model:	Single-stage		
Planned opening date:	28. November 2019	Deadline:	17. März 2020

Budget: 30 Mio. €

Specific Challenge:

Pan-European Research Infrastructures use more and more sophisticated technologies not available on the market, which require ad-hoc developments and often the use of large-scale platforms combining R&D (Research and Development), integration and validation. These platforms can also provide longer-term visibility and involvement of European industry in scientific and technological advancements and therefore ensure greater socio-economic impact.

Scope:

Funding will be provided to research infrastructure networks to kick-start the implementation of a common strategy/roadmap for technological developments required for improving their services through partnership with industry. Proposals should then involve research infrastructures, industry and SMEs to promote innovation and knowledge sharing through co-creation of needed technical solutions and make use, when appropriate, of large-scale platforms combining R&D (Research and Development), integration and validation for the technological developments.

Proposals should address:

- if not already done, the identification of key techniques and trends which are crucial for future construction and upgrade of the involved Research Infrastructures and the definition of roadmaps and/or strategic agendas for their development, in close partnership with the industrial partners, especially with innovative SMEs;
- the development of the identified fundamental technologies or techniques underpinning and arising from the efficient and joint use of the involved research infrastructures, taking into due account resource efficiency and environmental (including climate-related) impacts.
- the prototyping of higher performance methodologies, protocols, and instrumentation, including the testing of components, subsystems, materials, and dedicated software, needed to upgrade the involved research infrastructures, construct their next generation, or develop new advanced applications.

⁴ Link zum Arbeitsprogramm: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-infrastructures_en.pdf

As the grant will not cover the full implementation of the common strategy/roadmap for technological developments, proposals should define a sustainability plan for its further implementation. Proposals should contribute to fostering the potential for innovation of research infrastructures by reinforcing the partnership with industry, through e.g. transfer of knowledge and other dissemination activities, activities to promote the use of research infrastructures by industrial researchers, involvement of industrial associations in consortia or in advisory bodies.

Proposals may include PCP subcontracting activities as described in part E of the General Annexes of the Work Programme.

In order to exploit synergies, share results and avoid overlaps, grants awarded under this topic will be complementary between them. The respective options for complementary grants of Article 2, Article 31.6 and Article 41.4 of the Model Grant Agreement (MGA) will be applied. In addition, grants awarded under this topic should cooperate with the actions awarded under topic INFRAINNOV-03-2020 to identify and better exploit related synergies and to avoid overlaps. To this extent, proposals should foresee a dedicated task or work package and earmark appropriate resources. Proposals should also build on results from past/ongoing projects, such as AMICI, or the one funded under topic INFRAINNOV-02-2019.

This topic targets 'Advanced Communities' which have reached a high level of integration and can focus on joint research developments. On the basis of a multiannual plan drafted taking also into account the assessment and the timing of previous grants, this work programme invites proposals addressing the following three domains:

- Innovation in light source technologies
- Innovation in detector technologies for accelerators
- Innovation in accelerator technologies

The Commission considers that proposals requesting a contribution from the EU of up to EUR 10 million would allow this topic to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

This activity will:

- Enhance the scientific competitiveness of European Research Infrastructures in the long-term and the further development of innovative companies;
- Facilitate the creation of both large and viable markets and structuring industrial partners in a critical mass to enable European industry to respond to demands from international Research Infrastructures;
- Support the integration of research infrastructures into local, regional and global innovation systems.

Cross-cutting Priorities:

[Innovation Procurement](#)
[Open Innovation](#)

INFRAEDI-04 – Innovative High Performance Computing systems (PPI)

Säule I: Wissenschaftsexzellenz (entsprechend der Anordnung in Abb.1)

Die Ausschreibung wurde gestrichen; HPC-Maßnahmen werden durch das Joint Undertaking HPC

<https://eurohpc-ju.europa.eu/> umgesetzt.

Grundlegende und industrielle Technologien: Informations- und Kommunikationstechnologien⁵

ICT-other actions [11] – Eurochain: Developing a European Public Blockchain Infrastructure that builds on the European legal framework

Säule II: Führende Rolle in der Industrie (entsprechend der Anordnung in Abb.1)

Call identifier: Other Actions

Publication date: tbd

Types of action: PCP Pre-Commercial Procurement

DeadlineModel: tbd

Planned opening date: 1. Quartal 2020 (tbc)

Deadline: tbd

Die Ausschreibung befindet sich im hinteren Teil des Arbeitsprogramms. Auf dem Participant Portal ist sie noch nicht erfasst.

Budget: 7 Mio. € (tbc)

In-line with the objectives of the Next Generation Internet [ICT-54-2020: Blockchain for the Next Generation Internet] the European Commission will carry out a pre-commercial procurement for the development and testing of a novel, use-cases based, distributed ledger or blockchain solution which builds on the EU legal framework, in particular the General Data Protection Regulation, the eIDAS Regulation, the NIS Directive and the AML Directive¹⁴². Such a public infrastructure should meet core requirements of scalability and throughput, interoperability with other systems, security, robustness, sustainability, energy efficiency and continuity of the service. The aim is to go significantly further than what is offered by existing solutions. This procurement builds on the work of the European Blockchain Partnership for an advanced European Blockchain Services Infrastructure and will be done in cooperation with the members of European Blockchain Partnership. This action should aim at setting a global standard for blockchain infrastructures for public and private services.

The PCP procedure will be carried out in compliance with the rules laid down in article 51(1)(2)(4) of the [Horizon 2020 Rules for Participants](#).

Siehe dazu auch die kommende Ausschreibung ICT-54-2020: Blockchain for the Next Generation Internet (noch nicht auf dem Participant Portal erfasst).

⁵ Link zum Arbeitsprogramm IKT: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-leit-ict_en.pdf

Grundlegende und industrielle Technologien - Raumfahrt ⁶

MG-3-8-2020 – EGNSS applications for public authorities' pilot (PCP)

Säule II: Führende Rolle der Industrie (entsprechend der Anordnung in Abb.1)

Call identifier: H2020-SPACE-EGNSS-5-2020 - MG-3-8-2020

Types of action:	PCP Pre-Commercial Procurement		
DeadlineModel:	single-stage		
Planned opening date:	05 November 2019	Deadline:	05. März 2020 17:00:00

Budget: 3 Mio €

Specific Challenge:

Innovation procurement can drive the R&D and deployment of innovative solutions from the demand side through respectively pre-commercial procurement (PCP). This can open new market opportunities for companies in Europe, can contribute to speeding up public sector modernisation and can help to tackle societal challenges with innovative/breakthrough solutions for the benefit of the citizen.

Satellite navigation technology is an increasingly common component of innovative applications in different market segments. Involvement of public institutions is key in fostering the EGNSS adoption. Nowadays the maturity of EGNSS based solutions and their increased accessibility provide significant contribution to the achievement of Sustainable Development Goals of the governments.

The main challenge of this topic is to deepen user integration and thus foster exploitation of EGNSS applications to match the needs of public authorities at national, regional or local levels.

The innovative EGNSS solutions developed through this action should have been tested and have demonstrated success in smaller scale settings and have not yet been deployed on a large scale.

Scope:

The objective is to launch demand-driven actions by public authorities aiming at customising EGNSS applications for their needs. Transnational cooperation has a key role to play in this context, as it can facilitate knowledge transfer and optimisation of resources for public authorities. Proposals should be building on procurement needs of the participating organizations. The proposals should support the EGNSS market take-up across Europe and demonstrate a sustainability of solutions beyond the lifespan of the proposed project. The choice of EGNSS market segment and application is left to the proposer. A non-exhaustive list of possible applications is presented below:

- EGNSS for mobility as a service, cooperative ITS, public transport and smart cities,
- Implementation of Performance Based Navigation procedures,
- Integration of EGNSS into U-Space concept for drones,
- Helicopter emergency medical services with EGNSS capabilities (operations and equipment).
- Public rescue services with Galileo SAR capable helicopters, boats and drones
- EGNSS to support port operations,
- Monitoring of infrastructure with EGNSS (rail, road, critical infrastructure)

⁶ Link zum Arbeitsprogramm: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-leit-space_en.pdf

The consortium should engage public procurers from each country represented in the consortium (at national, regional or local level) that have responsibilities and budget control in the relevant EGNSS market segment.

Proposals should be built on the exploitation of the distinguishing features of EGNOS and Galileo signals and operational advantages in downstream applications.

EGNSS should be part and parcel of the envisaged solution(s). However, where a combination of EGNSS with other technologies is required to make the application(s) work, this is not excluded from the scope. Proposals addressing PRS (Public Regulated Service) related applications are not in the scope of this topic.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 3 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

Activities related to this topic should contribute to:

- The establishment of buyer groups for EGNSS application;
- Creation of EGNSS-enabled national, regional or local applications in support of public authorities;
- Fostering the emergence of similar EGNSS actions in smart specialisation strategies;
- Establishment of sustainable supply chains for delivery of downstream EGNSS applications to public authorities;
- Smart use of the procurement budget to remove supplier lock-in and obtain more open, standardized and better “value for money” solutions;
- Increase in quality, and decrease in prices, of EGNSS products and services;
- Increased exploitation of IPRs and R&D results;
- Creation of growth and jobs in Europe.

Cross-cutting Priorities:

[Innovation Procurement⁷](#)

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https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/ftags/innov_proc.html#c,topics=flags/s/InnovationProcurement/1/1&+callStatus/asc

Gesundheit, demografischer Wandel und Wohlergehen⁸

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Call identifier: SC1-BHC-20A-2020 und SC1-BHC-20B-2020

Types of action: PCP Pre-Commercial Procurement (20A)
PPI Public procurement of innovative solutions (20B)

DeadlineModel: single-stage

Planned opening date: 04 July 2019 **Deadline:** 07 April 2020

Budget zusammen: 25 Mio EUR

SC1-BHC-20A-2020 - Pre-commercial procurement (PCP) for integrated care solutions

Specific Challenge:

The challenge is to enable public procurers to collectively implement PCPs in order to close the gap between supply and demand for innovative integrated care solutions. The objective is to bring radical improvements to the quality and efficiency of public services and service delivery by encouraging the development and validation of breakthrough solutions through Pre-Commercial Procurement⁹.

Scope:

PCP actions targeting consortia of procurers with similar procurement needs that want to procure together the development of innovative integrated care solutions to modernize public services whilst creating growth opportunities for industry and researchers in Europe in addition to new markets. These can include, but are not limited to formal or informal organisational solutions, personal-health and self-care solutions, professional care solutions and ICT-based solutions. This topic is open to proposals for PCP actions in all areas of public sector interest requiring innovative integrated care solutions. It is open both to proposals requiring improvements mainly based on one specific solution/technology field, as well as to proposals requiring end-to-end solutions that need combinations of different innovative solutions from the healthcare point of view.

Proposals should demonstrate sustainability of the action beyond the life of the project. Activities covered should include cooperation with policy makers to reinforce the national policy frameworks and mobilise substantial additional national budgets for PCP and PPI, collaborating with respective EU funded projects in the area, as well as awareness raising, technical assistance and/or capacity building to other procurers beyond the project to mainstream PCP implementation and to remove obstacles for introducing the innovative solutions to be procured into the market.

The Commission considers that proposals requesting a contribution from the EU of up to EUR 5 to 6 million (corresponding up to 90% of the total budget) would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Specific requirements for PCP actions are described in part D and E of the General Annexes of the Work Programme.

Expected Impact:

⁸ Link zum Arbeitsprogramm: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-health_en.pdf

⁹ <https://ec.europa.eu/digital-single-market/en/pre-commercial-procurement>

- Reduced fragmentation of demand for innovative solutions in the area of integrated care;
- Increased opportunities for wide market uptake and economies of scale for the supply side through the use of joint specifications, wide publication of results and where relevant contribution to standardisation, regulation or certification.

The conditions related to this topic are provided at the end of this call and in the General Annexes.

SC1-BHC-20B-2020 - Public procurement of innovative solutions (PPI) for diagnostics for infectious diseases

Specific Challenge:

Implementation of timely and correct diagnostics for infectious diseases (ID) that will speed up the identification of the causative infectious disease pathogens, possible drug resistances and drug susceptibility is crucial for tailoring the antimicrobial treatment, thus ensuring appropriate antimicrobial drug use. A combination of rapid, accurate and specific diagnostics and correct treatment promises not only to reduce caseloads of multidrug resistant infections, but also to limit public spending for necessary isolation and hospitalisation by early and correctly identifying the appropriate treatment. In practice however, cost issues hamper the implementation of rapid diagnostics for ID in public health institutions, as innovative rapid diagnostics are still significantly more expensive than culturebased diagnostics. This issue and the lack of consideration of total cost of care limits the uptake of innovative rapid diagnostics in hospitals, which could result in a continued unspecific use of antimicrobials, prolonged hospitalisations and a non-patient centred provision of care.

Scope:

This topic will contribute to the EU One Health Action Plan on Antimicrobial Resistance and should specifically consider the following:

- Development of proposals for 'Public Procurement of Innovative Solutions' for the implementation of rapid diagnostic tools for infectious diseases in clinical practice. Proposals should be driven by clearly identified procurement needs of the participating organisations. In order to ensure compatibility and interoperability between infectious disease diagnostics and avoid technical/technology standardisation issues, public health procurers should also develop specifications that are applicable for EU-wide deployment of the innovative diagnostics.
- Applications should be driven by public and/or private procurers from each participating country (at national, regional or local level) that have responsibilities and budget control in the relevant area of supply of health and care services. They should demonstrate the applicability of the 'Most Economically Advantageous Tendering' approach in crossborder collaboration of public procurers in the EU, defining specific outcome criteria of importance for patients well-being, and for innovation of public procurement in the area of infectious diseases and AMR, taking also into account overall economic and societal benefits, and sex and gender differences when relevant..
- Proposals should include clear communication and outreach strategies aiming to actively promote and support public health procurement organisations and health care providers across regions and borders of the EU in adopting relevant innovation procurement approaches. They should specify measures that will ensure the sustainability of solutions beyond the lifespan of the proposed project.
- Synergies with the Structural Reform Support Program and the European Structural and Investment Fund are encouraged.

Activities covered should include cooperation with policy makers to reinforce the national policy frameworks and mobilise substantial additional national budgets for PCP and PPI, searching support and collaborating with respective coordination and networking projects, e.g. PIPPI and HCO-12. Likewise, awareness raising, technical assistance and/or capacity building beyond the project to mainstream PPI implementation and removing obstacles for introducing the innovative solutions to be procured into the market could be included.

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 and 5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Specific requirements for PPI actions are described in part E of the General Annexes of the Work Programme.

Expected Impact:

- Implementation of innovative procurement practices for diagnostics for infectious diseases in the EU, based on the 'most economically advantageous tendering' approach and involving newly acquired rapid diagnostic tests in hospital and ambulatory settings.
- Contribute to the EU One Health Action Plan on Antimicrobial Resistance, in particular in relation to 'Better Prevention and Control of AMR' and the goal to address patient safety in hospital environments by supporting good practices in infection prevention and control.
- Create new opportunities for market uptake and economies of scale for the supply side of rapid diagnostics in the area of respiratory tract infections across the EU.
- Reduced fragmentation of demand for innovative solutions.

The conditions related to this topic are provided at the end of this call and in the General Annexes.

SC1-DTH-14-2020: Pre-commercial Procurement for Digital Health and Care Solutions

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

DTH-14

Call identifier: SC1-DTH-14-2020

Types of action:	PCP Pre-Commercial Procurement		
DeadlineModel:	single-stage (tbc)		
Planned opening date:	19.11.2019 (tbc)	Deadline:	022. April 2020 (tbc)

Budget: 9 Mio €

Die Ausschreibung ist ein Update der Ausschreibung [SC1-DTH-10-2019-2020](#): Digital health and care services

Specific Challenge:

Digital solutions supporting a continuum of care across a range of health and care services can relieve the pressure on governments to provide more cost-effective health and care systems by improving the use of healthcare and health outcomes. In this context the challenges are to network, lead and facilitate health systems research, innovation and digitisation in view of addressing key areas of interventions in health and care services including health promotion and disease prevention.

Scope:

Support the health and care service provider to procure the development of digital services that can facilitate the transition to integrated care models across health and social services and country-specific cross-institutional set-ups, including decentralised procurement environments and collaboration across institutions. Key challenges that could be addressed are patient empowerment, self-management, patient safety, patient involvement, chronic disease management, diagnosing, hospital logistics, skills and independent living. These challenges could be addressed by ICT-based solutions such as, e-Health, telemedicine, and mHealth, to be defined through the market consultation process. This should result in early adoption and demonstration of the potential for scaling-up the services and positive impact with evidence of appropriate incentives of various actors. Legal, ethical, gender and socioeconomic issues should be addressed as appropriate.

Proposals should deliver and:

- be driven by clearly identified user needs guiding the procurers of the buyers group¹⁰;
- be driven by public and/or private procurers from each country participating (at national, regional or local level) that have responsibilities and budget control in the relevant area of supply of health and care services;

Proposals are encouraged to follow the principles of Green Public Procurement as appropriate, see http://ec.europa.eu/environment/gpp/index_en.htm

- demonstrate strong commitment of end-users and their communities in the co-creation process;
- as applicable contribute to the use of interoperable solutions based on open platforms and take into account existing best practices and standardisation initiatives;

¹⁰ Proposals are encouraged to follow the principles of Green Public Procurement as appropriate, see http://ec.europa.eu/environment/gpp/index_en.htm

- validate the benefits (both clinical and financial) of ICT-based services in comparison to traditional healthcare services;
- provide robust safeguards to ensure compliance with ethical standards, patients' rights and privacy protection;
- include clear time-lines, a well-structured work-plan aligned to the objectives of the different phases and according particular importance to the role played by the preparatory phase; (templates¹¹ made available by the Commission are strongly recommended to be used in particular as concerns the call for tender) and;
- address training aspects, digital health literacy and new collaborative innovation principles and practises, management, and retention of healthcare staff under this topic.
- build on expertise from and align with other relevant actions such as PIPPI¹² and EURIPHI¹³.

The procurers, hospital clusters, care services providers and other parts of the regional ecosystems should share knowledge, test results and needs to better coordinate the primary and community care, and stimulate local responsibility for care services, monitoring and rehabilitation. This may include aspects such as organisational processes, digital health literacy, workforce training, e-health workforce, financing and business models, hospital and telemedicine services, home care, patient centeredness, development of shared open source IT-based platforms, data integration, standards (supporting interoperability) and regulatory issues, management and retention of healthcare staff.

The service innovation should facilitate the early adoption and transferability (to other local contexts) of successful solutions addressing the innovation gap. Multi-policy/strategy collaboration across institutions (hospitals and institutions under the responsibility of municipalities or regions), industries, academia and user communities capable of establishing dedicated operational programmes are necessary to safeguard both the service and business performance metrics and the growth potential in the innovation chain.

The proposals should include the methodology foreseen to measure progress and validation process applicable in the tendering phase, towards the key performance areas of quality of care, sustainability and economic value within the selected key area of intervention, see e.g. Reference to MAFEIP¹⁴. Sufficient travel allowances for regular information days concerning the procedures and thematic networking events (e.g. related to relevant co-ordination and support actions including SC1-HCC-04-2018¹⁵) should be foreseen. A plan to implement the services should be included. In that context investigation of complementary procurement approaches (see e.g.¹⁶) including value based procurement are encouraged.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 and 5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Proposals for this topic should follow the specific requirements for pre-commercial procurement (PCP) supported by Horizon 2020 grants as set out in Annex E of the WP.

¹¹ template to be added

¹² <https://cordis.europa.eu/project/rcn/219012/factsheet/en>

¹³ <https://cordis.europa.eu/project/rcn/219929/factsheet/en>

¹⁴ Monitoring and Assessment Framework for the European Innovation Partnership on Active and Healthy Ageing – MAFEIP: <http://mafeip.eu>

¹⁵ EC Horizon 2020 SC1-HCC-04-2018: Digital health and care services – support for strategy and (early) adoption, pp. 95-98, http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-health_en.pdf, funded project: PIPPI: <https://cordis.europa.eu/project/rcn/219012/factsheet/en>

¹⁶ Targeted consultation on the draft Guidance on Public Procurement of Innovation, https://ec.europa.eu/growth/content/targeted-consultation-draft-guidance-public-procurementinnovation_en, EC DG GROW, 04/10/2017

Expected Impact:

The proposal should provide appropriate indicators to measure its progress and specific impact in the following areas:

- Established path to innovation, evidence of benefits of disruptive technologies that can support the development of sustainable business models, improved user and market engagement, strengthened procurement community, evidence of healthy innovation ecosystem including researchers, users, eHealth and other solution providers and procurers. Evidence in key performance areas i.e., quality in health and care, sustainability of the delivery system and economic value.
- Increased opportunities for solution uptake across wider international procurement markets by aiming at interoperable solutions that are validated through field testing by participating procurers in multiple countries across Europe and contribution to standardisation where relevant.

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Sichere, saubere und effiziente Energie¹⁷

LC-SC3-RES-10-2020 – 100% renewable energy (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

LC-SC3-RES-10-2020

Topic identifier: LC-SC3-RES-10-2020

Types of action: PCP Pre-Commercial Procurement

DeadlineModel: single-stage (tbc)

Planned opening date: 26 September 2019

Deadline: 26 March 2020 (tbc)

Budget: 15 Mio EUR

Specific Challenge:

The integration of technologies to achieve a 100% share of renewable energy generated and consumed in existing public buildings requires innovative approaches in order to develop efficient and low-cost systems that are easily run by operators and occupants. Furthermore, existing public buildings should be in line with the requirements of the Energy Performance of Buildings Directive, including national definitions of Nearly Zero-Energy Buildings (NZEBS).

This specific challenge targets consortia of procurers with similar procurement needs of common European interest, to drive innovation from the demand side and reduce fragmentation.

Scope:

The objective is to bring radical improvements to the quality and energy performance of existing public buildings by encouraging the development and validation of breakthrough solutions through Pre-Commercial Procurement. Support will be given for developing novel components and configurations to generate in an existing public building energy from renewable sources so that 100% of the energy consumption of the building (electricity, heat and cooling) is fulfilled by means of renewable energy and the yearly energy demand is followed to the largest extent possible. In order to achieve such an ambitious integration of renewable energy, buildings should start from a high level of energy efficiency.

The Commission considers that proposals requesting a contribution from the EU of between EUR 8 to 15 million would allow this challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts. Please see part E of the General Annexes for a description of the specific requirements for PCP actions.

Expected Impact:

The expected impacts are, on the one side, an effective integration of renewable energy technologies, and on the other side a reduced fragmentation of demand for renewable energy solutions in public buildings. In particular, procurers will be enabled to implement PCPs in areas which - due to their nature - are better addressed jointly, or which they would not have been able to tackle independently.

The conditions related to this topic are provided at the end of this call and in the General Annexes.

¹⁷ Link zum Arbeitsprogramm: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-energy_en.pdf

LC-SC3-JA-3-2019 – Wave energy (PCP)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

LC-SC3-JA-3-2019

Topic identifier:	LC-SC3-JA-3-2019		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
<hr/>			
Types of action:	PCP Pre-Commercial Procurement		
DeadlineModel:	single-stage		
Planned opening date:	14 November 2018	Deadline:	27 August 2019 17:00:00

Budget: 20 Mio. €

Specific Challenge:

The challenge is the design, development and validation of cost-effective Wave energy convertors that can survive in a harsh and unpredictable ocean environment as the ocean through demand-driven Pre-Commercial Procurement. The challenge is open to proposals seeking to steer wave energy research and development in an effective way at a European level establishing convergence of wave energy technologies and to bring these technologies to the market.

Scope:

In the past years, Member States and the European Commission have been working closely together to use their public resources via previous Ocean ERA-NET Cofund actions but like to reinforce their cooperation to address the challenge through a different funding instrument. In this European PCP action it is the aim to elevate experience with national public procurement approaches at a European level to bring European Wave Energy Research and Development more efficiently into the direction of commercialization.

The proposed action is to be structured along the following phases:

Preparation phase: The participating users/buyers of R&D service should agree on common performance levels and associated specifications for the wave energy systems. The action should introduce the ocean energy phase gate procedure on a European level.

They will plan the research and the design of actions covering a broad variety of issues. The PCP will consist of several building blocks addressing different sub-challenges. The funding of the participating programme owners (national and/or regional) and the European Union will be used for different stages in the wave energy technology development. The results of phase 1 should lead to calls for tenders (for the procurement of R&D services) which focus on clearly identified technologies which contribute to the

development of commercial wave energy devices. The procurement should be also open for developers, researcher organisations which are not located in the participating countries/regions.

The expected outcomes at this stage: 1) completed tender documents, 2) signed joint procurement agreement confirming the collaboration modus including the financial commitment of the buyers group and 3) final confirmation of the lead procurer.

Execution stage: The action will take care for the implementation of the Pre-Commercial Procurement and of the PCP contracts. The results will be shared within the European industry to accelerate technology development and the establishment of guidelines and standards to facilitate the transferability of the knowledge creation. The research and specification work should lead to at least 3 prototypes tested in an environment close to expected performance. At the end of the action at least one of the prototypes should be ready for testing in an operational environment at commercial scale.

Proposals have to describe the jointly identified challenge, indicating how it fits into their mid-to-long term innovation plans, why solutions currently available on the market or under development are not meeting their needs. Activities have to include: (1) networking related to preparation, management and coordination and (2) joint research activities related to the validation of PCP strategy.

The consortium should have at least three legal entities established in different member states or H2020 associated countries. In the consortium the participation of minimum two 'public procurers' is required. Other entities might be considered which can have a clear added value in the preparation and/or execution of the PCP or in coordination and networking activities.

Please see part E of the General Annexes for the specific proposal requirements for PCP actions.

The Commission considers that PCP proposals requesting a contribution from the EU of between 15 and 20 million would allow this area to be addressed appropriately. Nonetheless, this does not preclude submission a selection of proposals requesting other amounts.

Expected Impact:

- Convergence of wave energy technologies, acceleration of technology development, proof-of-concept and validation of wave energy technology for the benefit of the wave energy sector and as such improved knowledge transfer.
- Pool resources at national and EU levels dedicated to Research and Development and provide effectively a significant developmental boost of wave energy technology.
- More effective use of public resources for Research and Demonstration.

Sichere Gesellschaften¹⁸

SU-GM01-2018-2019-2020 – Pan-European networks of practitioners and other actors in the field of security (CSA)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

[SU-GM01-2018-2019-2020](#)

Call identifier: SU-GM01-2018-2019-2020
Focus Area Boosting the effectiveness of the Security Union

Types of action: CSA – Coordination and Support Action
DeadlineModel: single-stage
Planned opening date: 12 March 2020 **Deadline:** 27 August 2020 17:00:00

Budget: 7 Mio €

Specific Challenge:

In Europe, practitioners interested in the uptake of security research and innovation are dedicated to performing their duty and are focused on their tasks. In general, however, practitioner organisations have little scope to free workforces from daily operations in order to allocate time and resources to monitor innovation and research that could be useful to them. They have few opportunities to interact with academia or with industry on such issues. All stakeholders – public services, industry, academia – including those who participate in the Security Advisory Group, recognize this as an issue.

Scope:

Practitioners are invited to associate in 3 different categories of networks in the field security:

[...]

c. **[2018] Procurement agencies**, or departments, active at budgeting and implementing the acquisition of security solutions at European, national, regional or local level can get together: 1) to share investment plans, 2) to compare procurement techniques and rules, and 3) to plan for common procurements of research services as well as of innovative, off-the-shelf products.

The Commission considers that proposals requesting a contribution from the EU of about EUR 1.5 million per action for a duration of 5 years (recommended duration) for Part c) would allow for this topic to be addressed appropriately. Nonetheless this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

¹⁸ Link zum Arbeitsprogramm: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-security_en.pdf

Medium term:

- Common understanding of innovation potential, more widely accepted understanding, expression of common innovation and standardization needs among practitioners in the same discipline.
- Greater involvement from public procurement bodies upstream in the innovation cycle.
- More efficient use of investments made across Europe in demonstration, testing, and training facilities.

Long term:

Synergies with already established European, national and sub-national networks of practitioners, even if these networks are for the time being only dedicated to aspects of practitioners' work unrelated to research and innovation (in general, to the coordination of their operations).

The conditions related to this topic are provided at the end of this call and in the General Annexes.

SU-GM02-2018-2020 – Strategic pre-commercial procurements of innovative, advanced systems to support security (PCP)¹⁹

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

[SU-GM02-2020](#)

Topic identifier:	SU-GM02-2018-2020		
Focus Area	Boosting the effectiveness of the Security Union		
Types of action:	PCP - Pre-Commercial Procurement		
DeadlineModel:	single-stage		
Planned opening date:	12 March 2020	Deadline:	27 August 2020 17:00:00

Budget: 24 Mio. €

Specific Challenge:

Innovative solutions are needed when resources from different countries are required to work more closely together. Such solutions should support the development of the EU's Security Union.

Scope:

Sub-topic 2: [2020] Procurement of prototype systems among those specified as a result of Sub-topic 1 (PCP)

The Commission invites practitioners involved in projects funded under Sub-topic 1 to submit proposals for this PCP stage based on requirements resulting from those projects.

Phase 1: To finalise the tendering documents package for a call for tenders to build security-relevant prototypes based on the technical input resulting from Sub-topic 1 of this Topic. To define clear verification and validation procedures, methods and tools for the evaluation of the prototypes to be developed throughout the PCP stages;

Phase 2: To implement the call for tenders for research and development services. The call for tenders should envisage a competitive development composed of different stages that would lead to at least 2 prototypes from 2 different providers to be validated in real operational environment at the end of the PCP cycle;

Phase 3: To conduct the competitive development of the prototypes following the PCP principles including, at least, a design stage, an integration and technical verification stage and a validation in real environment stage. This process should be assessed following the procedures for verification and validation defined in the Phase 1;

Phase 4: To consolidate the results of the evaluation of the developed prototypes, extract conclusions and recommendations from the validation process, and to define a clear strategy for the further uptake of solutions. This strategy should consider joint-cross border procurement schemes and exploit synergies with other EU funds.

Proposals must build on the outcomes of the projects funded under Sub-topic 1. In order to guarantee a successful implementation of the PCP, proposals must provide clear evidence that such projects have delivered concrete outcomes on the following aspects:

¹⁹ this activity will be delegated to the Research Executive Agency, nevertheless the Commission reserves the possibility to exclude a specific project from the delegation to the REA if it appears that that project would necessarily have a close link to the development of EU policies in the field of security.

- That the challenge is pertinent and that indeed a PCP action is required to complete the maturation cycle of certain technologies and to compare different alternatives;
- That there is a consolidated group of potential buyers with common needs and requirements which are committed to carry out a PCP action in order to be able to take an informed decision on a future joint-procurement of innovative solutions;
- That there is a quantifiable and identifiable community of potential buyers (including and beyond those proposed as beneficiaries in the proposal) who would share to a wide extent the common needs and requirements defined and who would be interested in exploring further joint-uptake of solutions similar to those developed under the PCP, should these prove to be technologically mature and operationally relevant by the end of the project;
- That the state of the art and the market (including research) has been explored and mapped, and that there are different technical alternatives to address the proposed challenge;
- That the future PCP tendering process is clear, that a draft planning has been proposed and that the supporting documentation and administrative procedures will be ready on due time in order to launch the call for the acquisition of R&D services according to the PCP rules.

To ensure that the outcome of this action becomes available for further procurement purposes to EU Member State national authorities as well as EU agencies not participating, the proposal must provide evidence of the following:

- (1). Agreement from participating procurement authorities to negotiate, in good faith and on a case-by-case basis, with non-participating procurement authorities that wish to procure a capability or a product fully or partly derived from this action, the use of the information required to run such a procurement process, and solely for that purpose;
- (2). Commitment from participating procurement authorities to consult with any legal entity generating information to be released for the purpose set out in paragraph (1), unless contrary to applicable legislation;
- (3). Commitment from participating procurement authorities to negotiate the use granted under paragraph (1) on Fair Reasonable and Non-Discriminatory (FRAND) terms.

The centre of gravity for technology development with actions funded under this subtopic is expected to be up to TRL 8 – see General Annex G of the Horizon 2020 Work Programme.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 to 12 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Proposals should ensure that solutions will be developed in compliance with European societal values, fundamental rights and applicable legislation, including in the area of free movement of persons, privacy and protection of personal data. Societal aspects (e.g. perception of security, possible side effects of technological solutions, societal resilience) have to be taken into account in a comprehensive and thorough manner. All participating procurement authorities should also commit to comply with EU data protection legislation in the development of innovative, advanced systems to support security and in particular with the principles of data protection by design and by default.

Expected Impact:

Short term:

- Common requirements for innovative prototypes agreed among the practitioner organisations involved in the action;
- Technical tender documents ready for use by subsequent pre-commercial procurement actions, as well as by non-participating procurement authorities;
- Common solutions to address urgent security challenges jointly developed, integrated and valued;
- Potential demand for security solutions, inspired by those developed, is aggravated.

Medium term:

- To develop common technical specifications and reference performance levels for joint EU security solutions;
- To pave the road to market for technically mature and operationally relevant solutions and to accelerate their wide deployment in the EU.

Long Term:

- To contribute to narrowing down the gap between research and the market for the next generation of security solutions;
- To contribute to a single EU security market, by reducing market fragmentation and allowing exploitation of economies of scale;
- To facilitate access of new innovative players to the public procurement market;
- To contribute to reinforcing the competitiveness of the EU technology and industrial base.

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Intelligenter, grüner und integrierter Verkehr²⁰

MG-3-8-2020 – 'First of a Kind' solutions for sustainable transport and mobility: EU initiative for accelerating EU-wide market access, scale up and derisking (CSA)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Call identifier:	H2020-MG-2018-2019-2020		
Focus Area	Mobility for Growth		
<hr/>			
Types of action:	CSA – Coordination and Support Action		
DeadlineModel:	single-stage		
Planned opening date:	03 December 2019	Deadline:	21 April 2020 17:00:00

Budget: 1,5 Mio €

Specific Challenge:

Cleaner and more sustainable mobility is one of the major challenges of our time. The urgency and the magnitude of climate change calls for effective measures to remove obstacles that slow down the market uptake of innovative zero (and near to zero) emission technologies and services: on the one side, "first of a kind" solutions have a strong need for visibility, industrial viability and users' acceptance; on the other side, innovative solutions face harsh competition with traditional, existing solutions due to the inertia of the market and lacking critical mass.

Access to financing opportunities is another bottleneck, with a large overall financing gap and sub-optimal access-to-finance conditions²¹ Many companies struggle to raise sufficient funding due to the high level of risk and large capital requirements typical of transport innovation. Europe is losing out compared with the US and parts of Asia, even where it could enjoy "natural" competitive edge.

Innovative sustainable solutions in the field of transport and mobility need favourable conditions in order to accelerate scaling up and access to market, to maintain competitiveness and boost growth and jobs. Lowering the risk in acquisition of innovative (in particular of "first of a kind") products and services is a crucial condition for their wider market uptake. The development of innovative solutions shall also support the definition of additional/complementary services (such as collateral services contract) that can help users to overcome the technicalities connected to the embedding innovations.

Scope:

The aim is to develop an EU matchmaking system (both for tools and services) to de-risk large purchasing of first-of-a-kind solutions at European level and accelerate EU-wide market access and scale up of sustainable transport products and services and fostering their de-risking.

Proposals shall address all the following points:

- The concept of purchase aggregation of innovative zero emission transport solutions (Technology Readiness Level 7 and above) shall be developed, allowing to spread the related

²⁰ Link zum Arbeitsprogramm: http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-transport_en.pdf

²¹ "Financing innovation in clean and sustainable mobility Study on access to finance for the innovative road transport sector", EIB, April 2018, http://www.eib.org/attachments/pj/access_to_finance_study_on_innovative_road_transport_en.pdf

risk over a multiple number of regrouped buyers and de-risk purchases of innovative solutions. Proposals shall mobilize main actors such as public and private transport and mobility operators and other main stakeholders, multipliers and platforms (e.g. large public/private fleet users associations, fleet owners and transport and mobility operators, leasing companies, OEMs, tier 1 and tier 2 operators and innovative SMEs). In view of ensuring economic viability and continuation of the planned activities, users of the facility (conceived as a long lasting activity, going beyond the duration of the contract) shall also be involved in the proposal.

- The facility shall develop activities and offer services aiming at matching supply and demand via off-line and/or on-line tools and instruments, as well as alerts on availability of incoming new solutions. The supply-side of this facility shall regroup and provide visibility and outreach of first-of-a-kind products, technologies and services at European level. It shall offer a wide and regularly updated portfolio of solutions, grouped and listed according to different criteria, such as category, activity, application, area, etc. The demand-side of the facility shall regroup potential buyers and liaise with other existing actors such as large buyers groups, networks and platforms to support critical mass. Potential buyers will also have the opportunity to receive information on innovative solutions, including on an individual case-by-case basis. As an additional challenge, the platform shall regroup and list foreseen replacement plans and schedules of major buyers of transport and mobility products, technologies and services, to allow awareness of opportunities, peer review of such plans and possible purchase aggregations. Finally, the facility should interrelate asset management with risk management to further support the stakeholders.
- The facility shall also stimulate dissemination of information, exchange of knowledge and good practices on the deployment of innovative solutions, on European and national procurement processes as well as on regulatory issues. Specific services supporting access to innovation finance, on both demand and supply side should be included by building strong connections and synergies with ongoing and future instruments, such as the European Innovation Council (EIC), Connecting Europe Facility (CEF) and the European Investment Bank (EIB), as well as the wider European financial market.

Future sustainability of the system beyond the duration of the CSA is expected to be demonstrated.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 1.5 million would allow the specific challenge to be addressed appropriately.

Expected Impact:

- Accelerate EU-wide market access and scale up of innovative zero (and near to zero) emission transport and mobility technologies, products and services for both potential buyers and users.
- Achievement of critical mass for innovative solutions (with specific focus on first-of-a-kind solutions) through market aggregation of multiple buyers, matchmaking activities and other support services on both supply and demand side.
- Market scaling up of innovative zero emission solutions should support EU competitiveness as well as the reduction of CO2 emissions and pollutants.
- Amount of the financial resources to be mobilised to scale up innovative solutions for very low and zero emissions in the shortest time possible.

Cross-cutting Priorities: [Socio-economic science and humanities](#)²²

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<https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/ftags/ssh.html#c,topics=ftags/s/SSH/1/1&+callStatus/asc>

LC-MG-1-12-2020 – Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions (CSA)

Säule III: Gesellschaftliche Herausforderungen (entsprechend der Anordnung in Abb.1)

Call identifier:	H2020- LC-MG-1-12-2020		
Focus Area	Building a low-carbon, climate resilient future (LC)		
<hr/>			
Types of action:	CSA – Coordination and Support Action		
DeadlineModel:	single-stage		
Planned opening date:	03 December 2019	Deadline:	21 April 2020 17:00:00

Budget: insg. 4 Mio €

Expected Impact:

Europe's urban areas are struggling to develop themselves into well-connected multimodal and multi-usage nodes for smart and clean mobility. Multiple trends affect urban and inter-urban areas: urban growth, densification, digitalisation, increasing pressure from freight movements and a shift to a service-oriented economy. Moreover, many European cities and regions areas are committed to develop into zero-emission areas.

New technologies and innovative measures are emerging, but they are not taken up at a scale that is necessary to meet our climate targets and European transport policy objectives. In many instances, the responsible authorities (often operating at different governance levels) cooperate with public and private stakeholders. But the full integration and implementation of new solutions lags behind because little information, data and tested, innovative solutions are available on their effectiveness and on how to overcome the barriers to successful implementation into older legacy systems and ageing infrastructures.

Scope:

This topic is divided in 2 sub-topics.

Coordination and Support Action: fast-track and mainstream the replication of innovative, urban, peri-urban and rural mobility solutions

This part of this topic is a Coordination and Support Action that aims to fast-track and mainstream the replication of innovative, tested urban, peri-urban and rural mobility solutions (e.g. technological, non-technological, services, goods and infrastructure). Proposals are expected to set up and run a 'Fast-track to innovative sustainable motorised and non-motorised mobility' action (working title – proposers are invited to choose an appealing title), which offers support and services to at least 20 cities and municipalities or their organisational/functional groupings. A 'staged approach' is possible – taking into account mobility, investment or geographical needs as well as delivering the project efficiently. At least one-third of these 20 locations should be located in areas experiencing rapid economic and social change.

The proposal should include all of the following actions:

- Support for the development and towards implementation of innovative mobility solutions in 4 broad areas:
- Investments in and management of the transport network
- Supporting modal shift towards more energy-efficient, safer and active (whenever possible) modes for transport of freight and/or passengers
- New operating and business models in collective public and private transport (in any transport mode).
- Supporting mobility actions within the scope of the European Innovation Partnership in Smart cities and communities (or its successor working on smart cities).
- Development and implementation of a programme of tailored actions to deliver capacity building and institutional networking by:
 - a. Supporting staff exchanges, expert visits, and short term training.
 - b. Supporting the identification and access to financial and legal expertise, to define the feasibility to replicate an innovative mobility solution and to develop an innovation deployment programme of scale, notably: meetings with (potential) investors, opportunities for follow-up investments and identification of synergies with European funding and financing.
 - c. Providing matchmaking services for innovative mobility solutions establishing the link between "suppliers" that may be both public and private organisations, or groupings thereof (such as Horizon2020 funded projects) and "customers" that are mainly public organisations (such as city councils, regional authorities, transport operators or their groupings).
 - d. The project should deliver a set of recommendations to bridge the gap in the research and innovation performance and the deployment of the innovative mobility solutions across EU Member States.

The Commission considers that proposals requesting a contribution from the EU of EUR 1 to 1.5 million each would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Coordination and Support Action: prepare for the deployment of Urban Air Mobility in urban and peri-urban areas

The integration of vertical urban mobility solutions (drones, and other forms of low-aerial mobility, as well as services) into existing surface multimodal transport (both freight and passenger) systems will add further complexity to the organisation of the urban and peri-urban transport and mobility services. It will require changes in public/shared transport management, logistics operations and infrastructure operations. With rapid technological progress in urban air mobility, especially local and regional public sector authorities are faced with challenges such as in financing, procuring, planning (infrastructure, systems), transport operations, safety, noise, security and public acceptance of these solutions.

The proposal should include all of the following actions:

a) To provide a knowledge base (dynamic updated, with a "brand") and to deliver a set of policy recommendations (in at least 8 languages – for use by local, regional, national and European public authorities, businesses and other organisations) for measures to (seamlessly) integrate the vertical and horizontal dimensions in urban and peri-urban mobility systems. These are notably:

- Minimum required standards for products and processes in for ITS-type applications, urban planning (SUMPs), data-exchange, energy infrastructure, payments, environmental objectives, travel information and possibly other sectors such as building, construction, health care, retail etc.

- Foresight deployment scenarios of up to 10 possible use cases in 5 to 15 years; public acceptance, governance, mobility systems, energy supply systems, infrastructure, investment opportunities, funding and financing needs, and land-use. An approach to set up these scenarios with wide consultation should be included in the proposal to ensure that social acceptance aspects are fully understood.
- Tools for exchange and learning of urban air mobility with and to public authorities (notably local and regional), businesses civil society and research organisations.

b) To provide specific project development support and technical assistance for up to 10 deployment 'use cases' in locations (or groups thereof) with a demonstrated commitment from public and private organisations that are planning to start testing urban air mobility applications in the next 3 years. The type of support should as minimum include feasibility and market studies, programme and urban planning actions (for example procurement strategies).

This proposal should work closely together with the ongoing actions of the European Innovation Partnership in Smart cities (or its successor) and CIVITAS (or its successor) and possibly other networks with a strong participation of local and regional authorities.

The proposal should propose actions for cooperation with EASA, the SESAR Joint Undertaking, EUROCONTROL and the European U-Space Demonstrator network to ensure that project results are fed into developments in the institutional, regulatory and architectural frameworks for a competitive U-space services market.

The Commission considers that proposals requesting a contribution from the EU of EUR 1 to 1.5 million each would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact:

For the Coordination and Support Action: fast-track and mainstream the replication of innovative, urban, peri-urban and rural mobility solutions.

The following three main impacts are foreseen:

Firstly, proposals are expected to demonstrate how their activities will lead to fast-tracking and mainstreaming the replication of innovative, urban, peri-urban and rural mobility solutions. Proposals should as a minimum requirement provide; the expected number of people involved in the activities that will be undertaken in at least 20 cities/municipalities addressed by the project, information as to how their capacity will be improved to develop urban mobility and investment plans for deployment of innovative transport solutions. Secondly, the CSA is expected to lead to new research and innovation collaborations in sustainable urban mobility between organisations (public/ private), especially those located in countries that are more advanced and those located in countries lagging behind in the deployment of urban mobility innovations.

For the Coordination and Support Action: prepare for the deployment of Urban Air Mobility in urban and peri-urban areas

This action is expected to address the Amsterdam Drone Declaration²³ which "called upon urban transport actors, policy makers and associations to pioneer cases demonstrating which systems, solutions and services seamlessly integrate smart multimodal solutions" and which "invited cities and regions to co-create with the citizens the public conditions and the infrastructure for integrated air and ground smart mobility solutions to flourish, where new and clean technologies, big data, real-time information and corresponding business models converge towards the enablement and realisation of "mobility as a service".

²³ <https://ec.europa.eu/transport/sites/transport/files/2018-drones-amsterdam-declaration.pdf>

The expected impact of this CSA project is to provide especially cities and regions with better planning tools and knowledge to integrate new applications of urban air mobility in their passenger and freight systems. This topic complements topic 'MG-3-6-2020: Towards sustainable urban air mobility'.

Maßnahmenbeschreibung

Eine detaillierte Beschreibung der Maßnahmen finden Sie in diesem Dokument:

Annex E:

http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-e-inproc_en.pdf